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Our reference: 2413-141279RU/005
Application No.: 2007103357
Attorney Name: Sergey A. Dorofeev



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TRANSLATION

OFFICIAL ACTION

(21) Application number 2007103357/03(003608).
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(71) Applicant(s) SUEHIRO-SYSTEM CO., LTD., JP
SUEHIRO, Naotaka, JP
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QUESTIONS, ARGUMENTS, OBJECTIONS, PROPOSALS

An analysis of the application documents as submitted, thus carried out at the stage of the substantive examination in accordance with Part Four of the Civil Code of the Russian Federation (hereinafter referred to as the Code), which has been made effective since January 1, 2008 as well as the Patent Cooperation Treaty in the reading thereof now in force (hereinafter referred to as the Treaty) and the Patent Cooperation Treaty Instructions in the reading thereof now in force (hereinafter referred to as the Instructions) has shown the following.

1. In the Official Action as of July 30, 2008 the Examiner has reported its opinion about non-compliance of the claimed invention according to independent claims 1, 7 and 16 with the patentability condition of "novelty" as envisaged by Para.2, Art.1350 of the Code and has submitted the necessary arguments. The applicant has provided his arguments and amended claims, relative to which the Examiner points out the following.

2. Relative to the applicant's arguments.

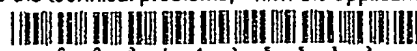
A.) The applicant has included such a new feature as "post-construction" (concerning the composite anchor bolt) into the claims, having pointing out that the main distinction of the claimed invention over the teachings of patents JP 61-2550 and JP 59-188892 consists in that it relates to a "post-construction" anchor bolt which is set to its place after the reinforced concrete frame is matured. In contradistinction to this, the anchor bolt described both in JP 61-2550 and in JP 59-188892 is preset to a required position in the structure of a reinforced concrete frame, and concrete is then filled in only after setting the anchor bolt.

The Examiner points out the following.

Such a feature as "post-construction" gives no new data concerning a composite anchor bolt, since any composite anchor bolt, whatever its structural particularities may be, is designed for its further use – i.e., for post-construction. Both in JP 61-2550 and in JP 59-188892, the composite anchor bolt is used for post-construction when it is mounted in the structure of a reinforced concrete frame.

Any indications concerned with the fact that the composite anchor bolt is set to its place after the reinforced concrete frame is matured are absent from the claims (both original and amended) (the new feature "post-construction" does not indicate to this).

However, as follows from the applicant's reply, the feature "which is set to its place after the reinforced concrete frame is matured" (concerning the post-construction anchor bolt) is essential since the technical problems, which the applicant solves



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in the claimed invention, are being solved for exactly such a bolt (this follows also from the specification, page 1); besides, it is exactly the above-mentioned feature that makes the claimed invention to distinguish over the teachings of the patents thus cited in opposition thereto.

In connection with this, the Examiner advises the applicant to revise the claims by incorporating therein the above-mentioned essential feature – "which is set to its place after the reinforced concrete frame is matured".

B.) The applicant points out that JP 51-2550 (and JP 59-188892) teaches that the top of the bolt 6 (8 – in JP 59-188892) projects out of the flange.

The Examiner points out that the claims (both original and amended) have no indication whatsoever as to that the claimed composite anchor bolt is made in some other way.

3. Concerning the amended claims.

A.) The Examiner advises the applicant to replace such features of claims 2, 7 and 8 as "the planar configuration of said connecting part" by such features as "the profile of said connecting part" in order to eliminate inaccuracy of translation.

B.) Such a feature of amended independent claim 7 as "said second anchor bolt can be selectively positioned in a certain circumference" is not expressed clearly and exactly (the claims have no data as to what circumference is implied here; besides, according to this formulation, the second anchor bolt can be also not positioned in that circumference), this being an infringement of Art.6 of Treaty.

The Examiner is of opinion that, in accordance with the specification, the above feature could have been set forth more correctly as follows: "said second anchor bolt is positioned in a circumference with the center on the axis of said connecting part and the first anchor bolt".

C.) Mention is made in independent claim 16 that "a composite anchor bolt ... comprises ... a planar connecting part".

However, in accordance with what reads the specification and is shown in the drawing figures, the connecting part 12 (212, 312) is not planar.

The Examiner is of opinion that, in accordance with Art.6 of the Treaty, this feature could have been set forth more correctly as follows: "a composite anchor bolt ... comprises ... a connecting part".

D.) In independent claim 16, mention is made of "removing a cylindrical or polygonal core". However, according to the specification, the core is not planar so that it cannot, therefore, be polygonal.

The Examiner is of opinion that, in accordance with Art.6 of the Treaty, this feature could have been set forth more correctly as follows: "removing a cylindrical or polyhedral core".

4. In the opinion of the Examiner, the claimed invention could have been characterized by the following combination of essential features:

"1. A post-construction composite anchor bolt which is set to its place after a reinforced concrete frame is matured, said bolt comprising:

a first anchor bolt installed projecting outside of the reinforced concrete frame;

and a second anchor bolt which is eccentrically positioned to the axis of said first anchor bolt; and

a connecting part for connecting said first and the second anchor bolts,

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wherein said connecting part is provided with a projecting portion which projects in the opposite direction to the first anchor bolt, thereby reducing the bending moment which is exerted locally on the connecting part due to a load on said first anchor bolt.

2. The composite anchor bolt according to claim 1, wherein the profile of said connecting part has a polygonal or circular shape, thereby increasing the compressive force transfer area of said projecting portion.
3. The composite anchor bolt according to claim 1, wherein said connecting part is formed to have top and bottom surfaces of a polygonal or circular shape, and said second anchor bolt is positioned at the center of the connecting part.
4. The composite anchor bolt according to claim 1, wherein said connecting part has an injection hole for the adhesive and an air hole.
5. The composite anchor bolt according to claim 1, wherein said first anchor bolt and said second anchor bolt are formed with the same or different diameters.
6. The composite anchor bolt according to claim 1, wherein said second anchor bolt has a larger diameter than said first anchor bolt, and formed with a shorter length embedded in the concrete.
7. A post-construction composite anchor bolt which is set to its place after a reinforced concrete frame is matured, said bolt comprising:
 - a first anchor bolt installed projecting outside of the reinforced concrete frame;
 - a second anchor bolt which is eccentrically positioned to the axis of said first anchor bolt; and
 - a connecting part for connecting said first and the second anchor bolts,wherein the center of said connecting part and the axis of the first anchor bolt are coaxial, the profile of said connecting part has a polygonal or circular shape, and said second anchor bolt is positioned in a circumference with the center on the axis of said connecting part and the first anchor bolt.
8. The composite anchor bolt according to claim 7, wherein the profile of said connecting part has either a circular, triangular, quadrangular, or polygonal surface to increase the adhesive area of the composite anchor bolt with the concrete.
9. The composite anchor bolt according to claim 7, wherein a reinforcing portion is formed at a joining point between said second anchor bolt and said connecting part to compensate for a bending moment which is exerted locally on the joining point.
10. The composite anchor bolt according to claim 7, wherein said first anchor bolt and said second anchor bolt are formed with the same or different diameters.
11. The composite anchor bolt according to claim 7, wherein said second anchor bolt has a larger diameter than said first anchor bolt, and formed with a shorter length embedded in the concrete.
12. The composite anchor bolt according to claim 7, wherein said connecting part has an injection hole for the adhesive and an air hole.
13. The composite anchor bolt according to claim 7, wherein at least one of said first anchor bolt and second anchor bolt is removably attachable to said connecting part.
14. A post-construction composite anchor bolt which is set to its place after a reinforced concrete frame is matured, said bolt comprising:
 - a first anchor bolt installed projecting outside of the reinforced concrete frame;

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a second anchor bolt which is eccentrically positioned to the axis of said first anchor bolt; and

a connecting part for connecting said first and the second anchor bolts,

wherein said connecting part and second anchor bolt are formed together in a T-shaped configuration, and said first anchor bolt is placed at the end side of the connecting part.

15. The composite anchor bolt according to claim 14, wherein at least one of said first anchor bolt and second anchor bolt is removably attachable to said connecting part.

16. A method of installing a post-construction composite anchor bolt which is set to its place after a reinforced concrete frame is matured, said method comprising:

preparing a composite anchor bolt which comprises a first anchor bolt projecting on the outside and a second anchor bolt positioned eccentrically to the first anchor bolt and a connecting part connecting the first and second anchor bolts;

removing a cylindrical or polyhedral core from the reinforcement covering margin to confirm the position of the reinforcement when reinforcement is encountered in the anchor borehole position, said core corresponding to the shape of said connecting part, and surrounding the borehole;

drilling a borehole for said second anchor bolt; and

jointly attaching said composite anchor bolt.

17. The method of installing a composite anchor bolt according to claim 16, wherein after the second anchor bolt is set into the drilled borehole, the adhesive is injected into an adhesive injection hole which is formed in said connecting part, air is released from an air hole which is formed in said connecting part, and said composite anchor bolt is attached.

18. The method of installing a composite anchor bolt according to claim 16, wherein a portion of said connecting part is projected outside from the concrete frame, and an equipment base is placed on said connecting part and attached with said first anchor bolt.

Thus, the Examiner would advise hereby that the applicant should submit his opinion in respect of the arguments of the Examiner and, in case if he agrees therewith, revise appropriately the specification in conformity with both the amendments thus made to the claims and the above-mentioned observations, and submit the revised specification in 3 copies.

In case of his disagreement about the amended version of the claims thus presented herein above, the applicant would be advised hereby to submit both his own version of the claims where all the above-mentioned observations should be properly taken into consideration, as required, but without reaching, when amending the claims, beyond the frames of the original documentary evidence pertaining to the pending patent application as envisaged in accordance with the provisions under Art.28(2) of the Treaty, and a revised text of the specification in 3 copies.

Leading official patent examiner